

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference 6W40049WO	FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/GB2004/003240	International filing date (day/month/year) 26.07.2004	Priority date (day/month/year) 20.08.2003	
International Patent Classification (IPC) or national classification and IPC H04N7/24, H04N5/00			
Applicant VODAFONE GROUP PLC et al			
1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of 8 sheets, including this cover sheet. 3. This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau) a total of 11 sheets, as follows: <input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).			
4. This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the opinion <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application			
Date of submission of the demand 04.05.2005	Date of completion of this report 24.11.2005		
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Horstmannshoff, J Telephone No. +49 89 2399-6961		



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2004/003240

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

Description, Pages

1, 2, 4, 7-9, 12	as originally filed
3, 5, 6, 10, 11	received on 10.05.2005 with letter of 03.05.2005

Claims, Numbers

1-31	received on 10.05.2005 with letter of 03.05.2005
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Drawings, Sheets

1/1	as originally filed
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- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2004/003240

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-31
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-31
Industrial applicability (IA)	Yes: Claims	1-31
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item V.

1 The following documents are referred to in this communication:

- D1: WO 01/35557 A (HIGHCAST NETWORK) 17 May 2001 (2001-05-17)
- D2: DE 100 53 751 A (SIEMENS AG) 18 April 2002 (2002-04-18)
- D3: WO 02/100072 A (SEQUOIA BROADBAND INC ; LEAN ANDY G (US);
LOCKHART KENNETH S (US)) 12 December 2002 (2002-12-12)
- D4: US 2003/154299 A1 (HAMILTON CHRIS) 14 August 2003 (2003-08-14)
- D5: MICROSOFT CORPORATION: "Microsoft Anti-Piracy Solutions Extended to
Upcoming Versions of Office, Windows and Visio Products Worldwide"
MICROSOFT PRESSPASS - INFORMATION FOR JOURNALISTS, [Online] 2
February 2001 (2001-02-02), XP002302563 REDMOND, WASHINGTON
Retrieved from the Internet: URL:<http://www.microsoft.com/presspass/press/2001/Feb01/02-02ProdActPr.asp> [retrieved on 2005-10-25]

2 INDEPENDENT CLAIM 1

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 does not involve an inventive step in the sense of Article 33(3) PCT.

Document D1 discloses (the references in parenthesis applying to this document):

A method of operating a communication system (abstract, page 4 line 27
- page 7 line 2, figures 1 and 4) including

- a plurality of user terminals (figure 1; page 18 lines 16-21; (58):
receiving devices) and
- a plurality of storage terminals (contained in receiving devices), each
being associated with at least one user terminal;

the method including

- storing encrypted content data on each of said storage terminals (page 5 lines 3-8, page 5 lines 18-22: "caching on the subscribers receiving device");
- generating schedule data; and
- transmitting the schedule data to the storage terminal (page 4 line 27 - page 5 line 3, page 7 lines 15 - 18, page 26 line 26 - line 28: "avail profiles" are transmitted to receiving devices which contain channel and time of program segments) via a mobile telecommunications network (page 16 lines 16-21);

wherein

- the storage terminal includes a time indicator (page 9 lines 1-3; page 30 lines 10-17: it is implicit that the receiving devices comprise a time indicator which indicates the current time to schedule the replay of the stored content), and
- the schedule data is generated such that it controls the time at which the content data is transmitted to the user terminal with respect to the time indicator of the storage terminal (page 9 lines 1-3).

The subject-matter of claim 1 therefore differs from this known from D1 in that the content data is encrypted and that the schedule data includes a decryption key for enabling decryption of the content data by the storage terminal.

The technical effect of this difference is that the content data stored on the storage terminal is protected against unauthorized viewing. Therefore, the objective technical problem to be solved is to provide a method for operating a communication system wherein the content is protected against unauthorized viewing.

In order to solve this problem, the skilled person would search the prior art for methods for providing protection against the unauthorized access to media data which is stored locally. Therefore, the skilled person would encounter document D2 (abstract; column 1 line 1 - column 3 line 34, figure 1) which discloses a method for the efficient transmission of media data to viewing terminals and their protection against unauthorized access. Here, the pre-stored media data is

encrypted. The decryption key is transmitted to the viewing terminals using a dedicated schedule command.

The skilled person would be prompted to solve the objective technical problem in exactly the same way as disclosed in document D2, by encrypting the content data and sending the decryption key within the schedule data.

Therefore, the skilled person would arrive at the subject-matter of independent claim 1 by combining the teachings of documents D1 and D2 without the involvement of an inventive step.

3 INDEPENDENT CLAIM 6

Independent method Claim 6 repeats the method steps of independent method Claim 1 except for the step of "storing the content data on a storage terminal". All features of independent Claim 6 are disclosed by the combination of documents D1 and D2. Therefore, the statement given in paragraph 2 of this opinion is also valid for independent Claim 6 which consequently does not meet the requirements of Article 33(3) PCT due to lack of inventive step with respect to documents D1 and D2.

4 INDEPENDENT CLAIM 14

Independent Claim 14 repeats the subject-matter of independent claim 1 in terms of apparatus features. Therefore, the statement given in paragraph 2 of this report applies equally to independent claim 14 which consequently does not fulfill the requirements of Article 33(3) due to lack of inventive step.

5 INDEPENDENT CLAIM 20

Independent Claim 20 repeats the subject-matter of independent claim 6 in terms of apparatus features. Therefore, the statement given in paragraph 3 of this report applies equally to independent claim 20 which consequently does not fulfill the requirements of Article 33(3) due to lack of inventive step.

6 DEPENDENT CLAIMS

The dependent claims do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT with respect to inventive step (Article 33(3) PCT).

In particular it is mentioned:

Claim 2:

Documents D1 (page 18 lines 16-21) and D3 (paragraph 14) disclose the transmission of content data over a mobile telecommunication network.

Claim 3:

Document D2 (paragraph 10) discloses transmitting of content when the network load is low.

Claim 4:

Document D5 (section "Product Activation Curbs Unauthorized Copying" last paragraph) discloses the storage of content (operating system including multimedia files) on a storage terminal (computer hard disk) prior to distribution of the terminal to the user. The transmission of this content is scheduled by the reception of an activation key.

Furthermore, it is common to ship PDAs with pre-installed content (navigation maps) which need to be activated using a key prior to accessing this content.

Claim 5:

Documents D1 (page 18 lines 16-21), D2 (paragraph 5) and D3 (paragraph 14) disclose transmitting content via internet.

Claim 7:

Document D1 (page 18 lines 30-32) discloses that storage terminal and user terminal are comprised in a single device.

Claims 8, 25:

Documents D1 (page 30 lines 10-23) and D3 (abstract) disclose that the schedule data is transmitted simultaneously with the content data.

Claims 9, 10, 12, 13, 15, 17, 18, 26, 27, 29, 30:

Document D3 (paragraphs 24-25) discloses user interaction to control the transfer of content to the user terminal or to respond to the displayed content.

Claims 11, 16, 28:

Document D1 (page 23 lines 3-9, page 21 lines 25-27) discloses the determination of the user terminal location and the transmitting of special locally adapted schedule data.

Claim 19:

It is obvious that GSM or UMTS can be used as a mobile telecommunication network.

Claims 21-24:

Documents D1 (figure 1), D2 (figure 1) and D3 (figure 1) disclose the means defined in said Claims.

Claim 31:

This claim repeats the subject-matter of independent claim 14 in combination with the claims depending on it.

10.05.2005

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to the accompanying drawing which shows schematically the components of the system of the embodiment and the data exchanges occurring between those components.

Mode of Carrying Out the Invention

In accordance with the embodiment, a user is provided with a storage terminal 1. The storage terminal is coupled to the user's television monitor 3 and/or audio system 5. The connection between the storage terminal 1 and the television monitor 3/audio system 5 may be by a conventional cable connection or by a wireless connection (such as Bluetooth RTM). The storage terminal 1 provides video and/or audio data to the television monitor 3/audio system 5 in a similar manner to a so-called "set-top box" provided to subscribers to cable or satellite television services. However, in accordance with the present embodiment, the arrangements for transmitting programming content (hereinafter referred to as "content data") to the storage terminal 1 are different.

Before these arrangements are described, it should be appreciated that, although the television monitor 3 and audio system 5 (these being "user terminals") are shown in the Figure as being separate components from the storage terminal 1, the user terminal and the storage terminal could be a single component, integrating the functions of the storage terminal, television monitor and audio system.

The storage terminal 1 includes a content data store 7, a receiver module 9, a transmitter module 11 for transmitting content data to the television monitor 3/audio system 5, and a processor 13. As discussed above, much of the programming content transmitted in real time on conventional television and radio networks comprises pre-recorded material. According to the present embodiment, a large amount of programming content (content data) is pre-stored in the storage module 7 as part of the manufacturing and configuration process of the storage terminal 1. The content data is stored on the storage module 1 prior to shipment of the storage module to the user's premises.

It should be appreciated that it is not essential that content data is pre-stored in storage module 7 prior to distribution of the storage terminal 1 to the user. The content data could be downloaded from a content data provider 19 to the storage module 7 by any suitable means, such as a cable connection, Internet connection or wireless connection (such as microwave radio), as indicated by the dashed arrow. Alternatively, content data can be downloaded from the content data provider 19 via mobile telecommunications network 17.

In a currently preferred embodiment, it is envisaged that a large amount of content data will be pre-stored in the storage module 7 prior to distribution of the storage terminal 1 to the user. However, new content data will be downloaded from the content data provider 19 to the storage module 7 periodically. New content data will be downloaded, for example, when a new programme becomes available (such as when a new movie is released), or when a new music release is made by a recording artist. If these periodic updates of content data are performed via the mobile telecommunications network 17, it is advantageous that these updates are performed at times when it is measured, or it is predicted, that the mobile telecommunications network will have spare capacity. Typically, this will be during the night, when fewer "conventional" mobile telephone calls occur. From the user's point of view the time of transmitting content data is irrelevant (and, indeed, the user may not be aware that the data is being downloaded at all). The user's ability to access the content data is controlled by the schedule data.

As discussed above, the content data itself is encrypted. Decryption is facilitated and controlled by the schedule data. Such an arrangement is advantageous when, for example, a new movie is released. To transmit the new movie to all users on a particular day or time would generate a very high burden on the mobile telecommunications network 17 (or other data transmission medium). However, in accordance with the embodiment, the content data representing the new movie can be transmitted to users over a long period of time, beginning substantially in advance of the official "release date" of the movie. The

commercial benefit to the distributor of the movie of controlling the release date is not lost because the date on which the movie can be viewed by each user is controlled by the schedule data. Transmitting schedule data from schedule data provider 15 to each user which allows viewing of the new movie by all the users at a particular date and time requires only a small fraction of the network capacity that would be required to transmit the entire movie.

For an arrangement of the type described above, it may be useful to provide the storage terminal 1 with a time indicator that provides an indication of the current time, which is accurate and resistant to unauthorised alteration. Otherwise, a user may be able to alter the time indicator of the storage terminal 1, thereby gaining access to the new movie at a time which is not intended by the distributor. It is therefore advantageous that the time indicator is "trusted" by the distributor of the movie. One way of providing a time indicator of this type is to use a Primary Reference Clock (PRC) based on timing signals received from the Global Positioning System (GPS). Using such a PRC, the mobile telecommunications network can always be sure that all associated terminals (such as receiver module 9) have the correct time and date, and these parameters cannot be changed by the user. Alternatively, the time indicator may be provided by a clock generator or "clock chip" in the storage terminal which is set when the storage terminal 1 is manufactured, and is designed so that the time indicated could not be changed by the user of the storage terminal 1. A facility may be provided for periodically verifying the time output of the clock generator/chip with the time available from a third party (for example, from the mobile telecommunications network 17, in order to ensure accuracy over an extended period). The control of the time of decryption of the content data and transmission to the television monitor 3/audio system 5 may be controlled in accordance with the method and apparatus disclosed in GB 2403382 ("Secure Time"), the content of which is hereby incorporated by reference.

receiver module 9. Further, if the user is roaming away from their home network, details relating to the location of that network (and possibly the location within that network) may also be made available to the processor 13 by means of the receiver module 9. It should be appreciated that, in addition to advertisement material being tailored to the user's location, it may also be desired to tailor other programming material to the user's location.

Using instructions contained in the schedule data the processor 13 provides, via the graphical user interface 23 on the television monitor 3, the facility for the user to respond to particular advertisements, for example by using the keypad of a remote control unit for the television monitor 3, to request for information concerning an advertised product or to purchase that product. The request for information or to purchase a product is then transmitted by the receiver means 9 of the storage module 1 (or the associated mobile telephone) to the mobile telecommunications network 17 and onwardly to an appropriate application service provider (not shown). Any charges associated with this request can be deducted from the user's account with the mobile telecommunications network 17. Details of the subscriber (such as their name and address) will be held by the mobile telecommunications network 17 and can be transmitted to the advertiser to allow delivery of the requested information product.

Although what has been described above is an arrangement which can provide programming content to a user in a similar manner to one or more conventional television channels (that is, providing generally the same programming content to all users), the system may be configured to allow each user to have made available to them programming content in which they are likely to have a particular interest. For example, when initially subscribing to the service, details of the user's interests will be noted, and programmes likely to be of interest will be pre-stored on the storage module 7. Of course, further content data can be subsequently provided by content data provider 19 as and when further programming is available which relates to the stated interests and/or when

the user's interests change. Schedule data provider 15 may then schedule a succession of programmes for particular subscriber interest groups - for example, history, sport, etc. Each user may be allowed freedom to deviate from the schedule data provided by the schedule data provider 15.

The programming content distribution system described offers several advantages.

The quality of the content data can be enhanced because it does not generally have to be transmitted in real time. Therefore, a higher quality picture and/or sound data may be transmitted than would be feasible if that video/audio information was transmitted in real time. Further, because the content data (or at least a substantial proportion of the content data) is pre-stored or transmitted significantly before the content data is to be accessed by the user, and also because the schedule data is transmitted in advance of the commencement of transmission to the user of the programming to which the schedule relates, the content data can be viewed by the user even when no or only poor radio coverage is available, such as when travelling through a tunnel.

Because the content data is stored on the storage module 7, the user may be permitted, using the graphical user interface 23 on the television monitor 3, to request that certain content data is repeated. Of course, for some content data (such as a recently released movie or a newly released song), the repetition of this content data may be provided only in exchange for a charge being made to the user (for example in the manner described above).

Content data may be provided for storage on the storage module 7 of each user's storage terminal free of charge. It may be difficult or impossible to prevent this distributed content data being copied and onwardly transmitted to third parties. However, the third parties will not be able to make use of the content as it is encrypted form at this stage. As discussed above, the content data can only be decrypted on receipt of appropriate

CLAIMS

1. A method of operating a communication system including a plurality of user terminals (3,5) and a plurality of storage terminals (7), each being associated with at least one user terminal (3,5); the method including storing encrypted content data (19) on each of said storage terminals (7); generating schedule data (15) including decryption key means for enabling decryption of the content data (19) by the storage terminal (7); and transmitting the schedule data (15) to the storage terminal (7) via a mobile telecommunications network (17); characterised in that the storage terminal (7) includes a time indicator, and the schedule data (15) is generated such that it controls the time at which the content data (19) is decrypted by the storage terminal (7) using the decryption key means and with respect to the time indicator of the storage terminal (7) such that the decrypted content data can be transmitted to the user terminal (3,5) at said time.
2. The method of claim 1, wherein at least some of the content data (19) is stored on the storage terminal (7) by transmitting the content data (19) over the mobile telecommunications network (17).
3. The method of claim 2, wherein the content data (19) is transmitted to the storage module (7) at a time selected to coincide with a time when network use (17) is or is expected to be relatively low.
4. The method of claim 1,2 or 3, wherein at least some of the content data is stored on the storage terminal (7) prior to distribution of the storage terminal (7) to the user.
5. The method of any one of the preceding claims, wherein at least some of the content data (19) is stored on the storage (7) terminal by transmitting the content data via the Internet.

6. A method of controlling access to encrypted content data stored on a storage terminal (7), including transmitting schedule data (15) to the storage terminal (7) via a mobile telecommunications network (17), the schedule data including decryption key means for enabling decryption of the content data (19) by the storage terminal (7); and receiving the schedule data (15) at the storage terminal (7); characterised in that the storage terminal (7) includes a time indicator, and the schedule data (15) controls the time at which the content data (19) is decrypted by the storage terminal (7) using the decryption key means and with respect to the time indicator of the storage terminal (7) such that the decrypted content data can be transmitted to a user terminal (3,5) at said time.

7. A method of any one of the preceding claims, wherein the storage terminal (7) and the user terminal (3,5) comprise a single device.

8. The method of any one of the preceding claims, wherein the time of transmission is controlled such that the content data (19) is made available to the user terminal (3,5) substantially simultaneously with the transmission of that content data (19) to the storage terminal (7) by the mobile telecommunications network (17).

9. The method of any one of the preceding claims, wherein the user of the user terminal (3,5) can select content data (19) to be transmitted to the storage terminal (7) and for the subsequent transmission to the user terminal (3,5).

10. The method of any one of the preceding claims wherein the user of the user terminal (3,5) can adjust the time of transmission of content data from the storage terminal (7) to the user terminal (3,5).

11. The method of any one of the preceding claims, including determining the location of the user terminal (3,5) and transmitting special schedule data (15) and/or content data

(19) in dependence upon the determined location.

12. The method of any one of the preceding claims, including enabling the user to respond to the content data (19) via the mobile telecommunications network (17).

13. The method of any one of the preceding claims, including enabling the user to perform a transaction associated with the content data (19).

14. A communication system including a plurality of user terminals (3,5); a plurality of storage terminals (7), each being associated with at least one user terminal (3,5); means for transmitting encrypted content data (19) to each of said storage terminals (7); means for generating schedule data (15) including decryption key means for enabling decryption of the content data (19) by the storage terminal (7); and means for transmitting the schedule data (15) to the storage terminal (7) via a mobile telecommunications network (17); characterised in that the storage terminal (7) includes a time indicator, and the schedule data (15) generating means generates the schedule data (15) such that it controls the time at which the content data (19) is decrypted by the storage terminal (7) using the decryption key means and with respect to the time indicator of the storage terminal (7) such that the decrypted content data can be transmitted to the user terminal (3,5) at said time.

15. The system of claim 14, including means for receiving a request for particular content data from a user, and means for transmitting that content data (19) to the storage terminal (7) for subsequent transmission to the user terminal (3,5).

16. The system of claims 14 or 15, including means for providing an indication of the location of the storage terminal (7) within the network, and means for altering the schedule data (15) for transmission to the storage module in dependence upon that location indication.

17. The system of any one of claims 14 to 16, including means for receiving instructions derived from the user terminal in response to the content data (19).
18. The system of any one of claims 14 to 17, including means for enabling a transaction associated with the content data (19) to be performed.
19. The system of any one of claims 14 to 18, wherein the network is a GSM or UMTS mobile telecommunications network.
20. A storage terminal (7) for storing encrypted content data, the storage terminal (7) including means for receiving schedule data (15) via a mobile telecommunications network (17), the schedule data including decryption key means for enabling decryption of the content data (19) by the storage terminal (7); characterised in that the storage terminal (7) includes a time indicator, and the schedule data (15) controls the time at which the content data (19) is decrypted by the storage terminal (7) using the decryption key means and with respect to the time indicator of the storage terminal (7) such that the decrypted content data can be transmitted to a user terminal (3,5) at said time.
21. The storage terminal of claim 20, wherein the receiving means (9) comprises an interface for receiving the schedule data (15) from a mobile terminal, which mobile terminal is operable to receive schedule data (15) from the mobile telecommunications network (17).
22. The storage terminal of claim 21, wherein the receiving means (9) comprises a transceiver connectable to the mobile telecommunications network (17) for receiving schedule data from the mobile telecommunications network (17).
23. The storage terminal of claim 20, 21 or 22, including means for receiving content

data (19) to be stored over the mobile telecommunications network (17).

24. The storage terminal of any one of claims 20 to 23, including means for receiving content data (19) to be stored by means of the Internet.

25. The storage terminal of any one of claims 20 to 24, including means for transmitting (11) content data (19) to the user terminal (3,5) substantially simultaneously with transmission of that content data (19) to the storage terminal (7) by the mobile telecommunications network (17).

26. The storage terminal of any one of claims 20 to 25, including means for receiving (13) instructions from the user terminal (3,5) which are indicative of a selection of content data required, and means for transmitting a signal indicative of this selection to a content data provider.

27. The storage terminal of any one of claims 20 to 26, including means for adjusting the transmission time of content data (19) from the storage terminal (7) to the user terminal (3,5).

28. The storage terminal of any one of claims 20 to 27, including means for determining the location of the storage terminal (7) and for varying the content data (19) transmitted to the user terminal in dependence upon that location determination.

29. The storage terminal of any one of claims 20 to 28, including means for transmitting a response to the content data (19) from the user terminal via the mobile telecommunications network (17).

30. The storage terminal of any one of claims 20 to 29, including means (13) for enabling a transaction associated with the content data (19) to be performed.

31. The communication system of any one of claims 14 to 19, wherein at least one of the storage terminals is in accordance with any one of claims 20 to 30.